

Serial No.: 09/461,900

Attorney Docket No: MCS-118-99

REMARKS

In response to the Office Action dated September 10, 2003 (Paper No. 6), claims 1, 16 and 20 have been amended. New claims 39 and 40 have been added. Therefore, claims 1-40 are now in the case. Reexamination and reconsideration of the amended application are requested.

Drawing Objections

The Office Action objected to FIGS. 1 and 2 of the drawings. In particular, the Office Action stated that FIGS. 1 and 2 should be designated as "Prior Art" because only that which is old is illustrated.

In response, the Applicants respectfully traverse these objections for the following reasons. FIG. 1 represents a "suitable operating environment in which the invention may be implemented" (specification, page 6, lines 25-28). This description of an exemplary operating environment is provided in part to ensure that it is clear that the subject invention operates in a computing environment and meets the patentable subject matter requirements of 35 U.S.C. § 101. Several hundred patents have issued with this computing environment drawing without the need for the "Prior Art" designation. Thus, the Applicants respectfully request that the objection to FIG. 1 be reconsidered and withdrawn.

Regarding FIG. 2, the Applicants respectfully contend that at least some of what is illustrated is not old. More specifically, FIG. 2 illustrates the network simulation system 200 of the subject invention incorporated into two computer networks (specification, page 5, lines 17-18). The network simulation system 200 includes the novel record module 244 that resides on the recording server 208 (specification, page 11, lines 27-29; FIG. 2). Moreover, the network simulation system 200 includes the novel playback module 272 that reads the requests recorded by the record module 244 and plays these requests back to a testing server 256. Because FIG. 2 illustrates that which is new, the Applicants respectfully request that the objection to FIG. 2 be reconsidered and withdrawn.

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Section 102(e) Rejections

The Office Action rejected claims 1-38 under 35 U.S.C. § 102(e) as being anticipated by Weinberg et al. (U.S. Patent No. 5,974,572). The Office Action stated that Weinberg et al. disclose each and every element of the Applicants' claimed invention.

In response, the Applicants respectfully traverse these rejections based on the amendments to claims 1, 16 and 20 and the following legal and technical analysis.

In general, the Applicants submit that Weinberg et al. lack at least one feature of the Applicants' claimed invention. In particular, Weinberg et al. do not disclose, either explicitly or implicitly, the material claimed feature of a filter located on a record server for recording network characteristics.

Amended Independent Claim 1

Amended independent claim 1 of the Applicants' claimed invention includes a network simulation system for simulating network characteristics. The system includes a record module having a filter that resides on a server and records network characteristics. The system also includes a data collector file that stores the recorded network characteristics for playback on a playback machine.

The filter is located on the record server. In this position, the filter uses its unique position to record and collect "more accurately the network characteristics being received by the server" and provide "more data on these network characteristics than other systems and techniques" (specification, page 3, lines 18-20). These other systems and techniques include server access files and server log files. The filter produces a log file that is different and separate from the standard server log files. In fact, the "present invention also provides a record of network characteristics that are not captured in server log files (such as bad requests from a client)" (specification, page 3, lines 16-18; emphasis added).

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In other words, the filter of the present invention is a separate recording mechanism from traditional server log files commonly kept by servers. In the working example contained in the Applicants' specification, the filter was an ISAPI global filter that was implemented into IIS between the IIS port handling and the IIS processing layers (specification, page 23, lines 24-27). Because the filter records network characteristics independently of the traditional server log files, the filter actually captures network characteristics not present in server log files (specification, page 3, lines 16-18). This is due in part to the filter's location on the server. In particular, "[B]ecause of the way the ISAPI global filter was implemented into IIS the ISAPI global filter actually got called before IIS began processing the data. This feature can be useful for troubleshooting the network because by examining the log file [as recorded by the filter -- this is different from the traditional server log files] it can be determined at what time a network problem occurred and what request may have caused the network problem" (specification page 24, lines 16-20). A traditional server log file simply cannot be used for this type of troubleshooting since it does not capture bad requests from a client (specification, page 3, lines 16-18). Thus, the Applicants' claimed invention includes a filter that resides on the record server that is **separate from the server log files** and records network characteristics not captured in server log files.

In contrast, Weinberg et al., merely disclose a variety of filters that reside on a client and merely filter (not record) site maps of a Web site (col. 16, lines 9-10). In addition, Weinberg et al. disclose using an application running on a client to obtain data from server log files and superimpose that data onto the site maps (Abstract).

Specifically, Weinberg et al. disclose a visual Web analysis program that uses a variety of components running on a client to generate a load test of a server. One of the main components is the Astra SiteManager program that facilitates mapping, analysis and management of Web sites. The Astra program "runs on a client computer" (col. 7, lines 43-45). Astra builds a site map of a Web site by using a scanning process. This scanning process "involves capturing the output of a Web browser" (col. 9, lines 22-27).

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Astra includes a number of plug-ins that reside on the client (col. 17, lines 65-67 to col. 18, lines 1-2; FIG. 7). One of these plug-ins is called the Action Tracker, which retrieves server access log files for performing Web site activity analysis (col. 18, lines 62-67; FIG. 7). These server log files are log files that are commonly maintained by standard Web servers (col. 27, lines 65-67). Astra uses this information "contained within a log file in combination with the associates site graph to determine probable paths taken by visitors to the Web site" (col. 28, lines 14-17). Thus, Astra, which resides on the client, retrieves and uses traditional server log files.

Weinberg et al. also disclose "the ability to automatically generate load testing scripts, and associated 'scenario files,' from server access log files of Web sites" (col. 31, lines 61-63). These scripts may be generated in one of two ways. First, the scripts may be generated by capturing and recording "the output of a standard Web browser during interactive browsing of the site by a user" (col. 32, lines 39-42). The "browser output is captured and recorded using a 'Web Vuser Generator' component" (col. 32, lines 42-43). Thus, no recording of information received by the server is performed in this situation to generate the scripts.

Second, the scripts may be generated by using information "stored within server access log files" (col. 33, lines 47-50). These "log files represent the actual browsing behaviors of past visitors to the site" and "accurately emulate realistic load conditions" (col. 33, lines 61-64). It should be noted however, that these log files are traditional or standard server log files generated by the server.

Weinberg et al. disclose a number of information filters that are part of the Astra graphical user interface. These filters reside on the client. Moreover, these filters are not used to record, but instead are used for "filtering the content of site maps" (col. 16, lines 9-10). In addition, Weinberg et al. disclose log filters also do not record but filter the content of the server access files (col. 30, lines 33-35). Moreover, these log filters also reside on the client.

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In the above analysis, the Applicants have shown that Weinberg et al. lack the Applicants' claimed feature of record module having a filter that resides on a server and records network characteristics. The Applicants, therefore, respectfully traverse the rejection of amended independent claim 1 because Weinberg et al. do not disclose, either explicitly or implicitly, this material claimed feature. Because of this missing feature, the §102 rejection cannot stand.

Amended Independent Claim 16

Amended independent claim 16 includes a network simulation system for playing back recorded network characteristics. The system includes a data collector file that contains network data that has been recorded by a filter that resides on a recording server. In addition, the system includes a playback module that resides on a playback machine and plays back the data collector file. The network data is sent by the playback to a testing server to simulate network characteristics on the testing server.

As set forth above, Weinberg et al. merely disclose using filters that reside on a client and merely filter (not record) site maps of a Web site. Moreover, Weinberg et al. disclose using an application running on a client to obtain data from standard server log files and superimpose that data onto the site maps. Nowhere do Weinberg et al. disclose the Applicants' claimed feature of a data collector file that contains network data that has been recorded by a filter that resides on a recording server.

The Applicants, therefore, respectfully traverse this rejection of amended independent claim 16 because Weinberg et al. do not disclose, either explicitly or implicitly, this material claimed feature of the Applicants' invention. Because of this missing feature, the §102 rejection cannot stand.

Amended Independent Claim 20

Amended independent claim 20 includes a method of simulating computer network characteristics on a testing server. The method includes recording network data using a filter residing on a recording server, and storing the recorded network data. The method

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further includes playing back the recorded network data on a playback machine in communication with the testing server.

As set forth above, Weinberg et al. merely disclose using filters that reside on a client and merely filter (not record) site maps of a Web site. Moreover, Weinberg et al. disclose using an application running on a client to obtain data from standard server log files and superimpose that data onto the site maps. Nowhere do Weinberg et al. disclose the Applicants' claimed feature of recording network data using a filter residing on a recording server,

The Applicants, therefore, respectfully traverse this rejection of amended independent claim 20 because Weinberg et al. do not disclose, either explicitly or implicitly, this material claimed feature of the Applicants' invention. Because of this missing feature, the §102 rejection cannot stand.

Independent Claim 34

Independent claim 34 includes a method of recording network characteristics. The method includes providing a server having an operating system, and registering a filter residing on the server with the operating system. The method further includes using the filter to capture network data containing the network characteristics, and storing the captured network data in a data collector file for playback.

As noted above, Weinberg et al. merely disclose using filters that reside on a client. Moreover, the filters disclosed by Weinberg et al. do not record network characteristics. Instead, the filters of Weinberg et al. are used to filter site maps of a Web site.

The Applicants, therefore, respectfully traverse this rejection of independent claim 34 because Weinberg et al. do not disclose, either explicitly or implicitly, the material claimed feature of the Applicants' invention of registering a filter residing on the server with the operating system and using that filter to capture network characteristics. Because of this missing feature, the §102 rejection cannot stand.

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Conclusion

Because the Applicants' claimed invention includes features neither taught, disclosed nor suggested by Weinberg et al., the Applicants respectfully submit that the rejections of amended independent claims 1, 16 and 20 along with independent claim 34 under 35 U.S.C. § 102(e) as being anticipated by Weinberg et al. has been overcome based on the amendments to claims 1, 16 and 20 and the arguments and analysis set forth above. Moreover, rejected claims 2-15 depend from amended independent claim 1, rejected claims 17-19 depend from amended independent claim 16, rejected claims 21-33 depend from amended independent claim 20, and rejected claims 35-38 depend from independent claim 34 and therefore also are novel over Weinberg et al. (MPEP § 2143.03). The Applicants, therefore, respectfully request reexamination, reconsideration and withdrawal of the rejection of claims 1-38 under 35 U.S.C. § 102(e) as being anticipated by Weinberg et al. based on the amendments, arguments and analysis presented above.

New claims 39 and 40 include a custom-generated log file produced by a record module on a server that is separate from and not a server log file of the server. This claimed feature of the Applicants' invention is not disclosed by Weinberg et al. or any of the cited art.

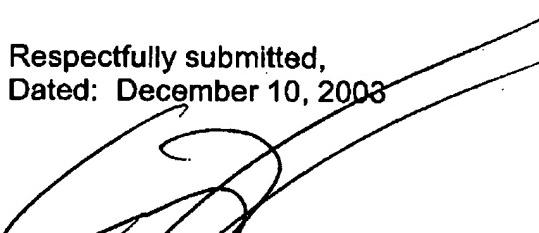
The Applicants, therefore, submit that claims 1-40 of the subject application are in immediate condition for allowance. The Examiner, therefore, is respectfully requested to withdraw the outstanding rejections of the claims and to pass all of the claims of this application to issue.

In an effort to expedite and further the prosecution of the subject application, the Applicants kindly invite the Examiner to telephone the Applicants' attorney at (805) 278-8855 if the Examiner has any comments, questions or concerns, wishes to discuss any aspect of the prosecution of this application, or desires any degree of clarification of this response.

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Respectfully submitted,
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